

SINCUS NEWS

-----the newsletter of the-----
 Sinclair Computer Users Society
 1229 RHODES ROAD
 JOHNSON CITY, NEW YORK 13790

-----Since 1982-----

Summer 1987 is history, and this Labor Day weekend I find some time to finish this issue. The July and August meets were lightly attended and short. Carl Morris brought his PC8300, the Chinese TS1000 clone to the August meet, and those present learned what it can do, and also found out what \$30 these days will get you. Thanks Carl.

Local members dues are due! If this newsletter is addressed to you by hand (not printed label), your dues are past due. Please mail in your 87-88 dues today, or your name will be dropped from our mailing list. We hope to see all at the upcoming meets, and here are the meet dates for the remainder of 1988:

SEP 16 OCT 21 NOV 18 DEC 16

At the Vestal Library at 7pm. Bring an idea, a project or a recent purchase, bring a friend, come on down!

Our meet schedule for 1988 is a mess! By the time I got to the library to arrange for the meeting room for 1988, the local commodore club had picked up everyother third Wednesday. Getting the same day of each month was impossible. The 1988 meet schedule is as follows:

Jan 27 Feb 17 Mar 23 Apr 20 May 25 Jun 15 July 27
 Aug 17 Sep 28 Oct 19 Nov 30 Dec 21

All are Wednesday nites, at 7pm. at the Vestal Library.

Editorial: Please do NOT send cash to us thru the mail. Please use a check or money order, and make sure your return address is on the check or money order. Thank you.

A critique of SINCUS NEWS, and one that I have heard before, and do not know how to solve, is that a new reader, or new user is unfamiliar with the abbreviations and jargon used on these pages. Likewise at meets, the language is heavy with jargon, abbreviations and insider quips. For the most part a new user or reader can learn more by asking questions, easily done at meets, more difficult in the newsletter. I get several newsletters, magazines and ads each month, and occasionally have to figure out the abbreviations myself. For years, SS, DC, DD and DS meant Single Side, Double Density, Quad Density and Double Sided, now I see 2S and 2D, do they mean the same? All the terms I am referring to are describing floppy discs. A glossary of terms included with each issue, or with each new member maybe an answer. Any suggestions? In each issue I am either trying to make space for what I have or trying to fill up blank space, so I tend to try to get out the info I understand without looking at it with NEW eyes. I also note I am reluctant to expose my ignorance in front of a room full of computer experts, but if I want to learn...

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I wish to thank the author of the Copy right article from the Dallas TS User Group, it is a subject addressed by this editor several times in the past and still of great interest. The article does make very good reading! Paul Hill Editor.		

This issue marks end of two years of editing and publishing SINCUS NEWS, anyone want to take a shot at it is welcome. Call or drop me a note-thanks.

Announcing the start of a NEW newsletter--for 2068 users and Oliger Disc fans. Brave souls these folks, going on four years since that Xerox wrist clock company chickened out on us, and some have the nerve or gall to start up another newsletter.

Well we here at SINCUS wish them well and all the luck for the promises and hopes they have for their new publication. Lets face it folks, there isn't a whole lot you can spend money on for your 2068, so you may as well get in on another newsletter. In the past you had programs, printers, modems and IFs galore to purchase, plus several magazines, now you got.... Subscribe to a couple newsletters, and the remaining magazines, learn something new, what were you going to do with all that money? Save it??

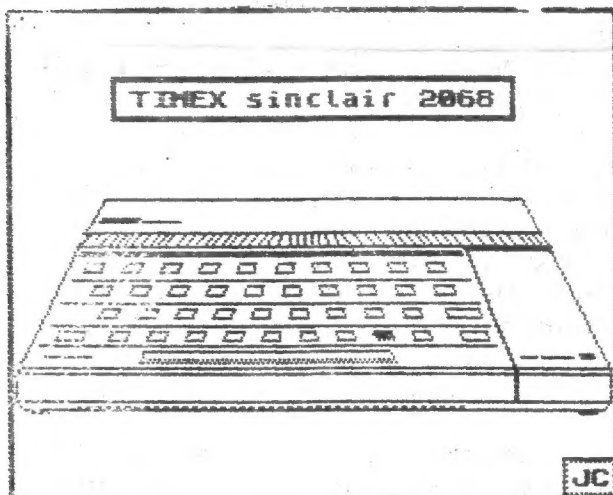
So here's the info on the newest newsletter:

TS2068
Safe Disk Up-Date
the user's NEWS
1317 Stratford Ave.
Panama City, FL 32404
(904-871-4513)

TS2068 Safe Disk Up-Date is a Quarterly newsletter devoted to the support of users who have up-graded to Disk drive systems. A special feature section is about the Oliger Safe Disk Operating System (SDOS). Newsletter issues are published on the first day of January, April, July and October. Annual subscription is \$12.00 per year. Bill Jones, Editor

Building Block SectionsSoftware and Hardware:
Articles and Reviews***TS2068 Computing with
SDOS***Technical: Schematics, Data Sheets,
Interfacing***Subscribers Free Ads: Swap, Sell and
Wanted***

Artwork screens via Pete Fischer
and John Colonna.



***** EVERYTHING YOU EVER WANTED TO XEROX ABOUT
COPYRIGHTS.

-(C) 1987 in the Public Domain-

I want to explain a little I have found out about copyright law, because it is really getting to be an important subject for everybody in the computer world, not just for artists and playwrights and novelists. Now it is necessary for Programmers to know what part of their work, if any, is protected from use or reproduction without their consent.

It is also IMPERATIVE that computerists know where they stand when they buy or use somebody's copyrighted product, and how to do Right by both programmer and themselves, because the claims of some software companies and their "licenses" make the subject really confusing.

-DO I KNOW LAW? NO, BUT IF YOU HUM A FEW BARS...

There are folks who necessarily spend years working with the Ins and Outs of U.S. Copyright Laws, and so it is not likely we are going to wring out all the details here. Moreover, I am not a lawyer, and they are the experts in the field. I have just been exposed to a few viewpoints here and there, because as editor of a newsletter that NEEDS material to exist, the temptation to borrow blindly is strong. I wrestle occasionally with both conscience and pride-- I lose out to each.

-GIVE ME LOTUS 1-2-3 OR GIVE ME DEATH...

I feel I'm not the only one who wishes that, in the true spirit of fellowship, I could take this and that and pass it along, certain in the knowledge that the author INTENDS us to be so enriched. In computer circles, such fellowship is tradition. We tend to assume that since we are not out for profit, we can disseminate whatever we find. But combine this with a lack of understanding of what a copyright is and does, and the stage is set for people to scream "Pirates" and accuse the whole computer world of what few actually do knowingly. Some think, for instance, that a copyright is a symbolic term for "Please give me credit for having originated this"; Heck, I've seen Program Copy Services, calling themselves Libraries; that run on the premise that as long as the author gets credit on the screen listing, copyright obligations have been fulfilled. The more reputable libraries all have store-bought programs, and that in itself is no sin. But some individuals who peruse the libraries get a bit confused-- Isn't that software company defunct? Well, then, the program is Public Domain, wouldn't you say?

I was inclined to agree; I wish I had copied all those programs before I started reading about copyrights.

Hey, I'm looking from both sides of the fence and cursing the fence that spoils the view.

-THE PLAIN FAX....

Copyright law is not instinctive. I read a government pamphlet, talked with some friends, a librarian; looked it up in the encyclopedia. I still can't believe it is such a mess.

But the first point to make is this: It is Law. No one guarantees it makes sense. Law is not bound to such things (ask a lawyer; law supercedes sensibilities).

One can at least hope that there is some sort of principle that originally guided the lawmakers.

Point Two: Ideas, your thoughts, are not and cannot be owned by anyone. But a Creation of your mind and talents and Ideas CAN be owned, bought, sold, traded, and controlled. It is put "on the marketplace" by you. (Even Patent laws, which we aren't going to go into much, recognize this point-- a sound patent is based on the shown Application of an idea... the idea is protectable once it makes its PRACTICAL appearance.)

Now there can't really be an "idea marketplace" where people pay for the value of innovations, perspectives, unique applications, and just plain hard work-- not if these same things can be stolen for free. People can't stop letting others have the products of their minds, either.

The only solution which allows a market for the creative intellect is to use society's coercive force: Government. What we are talking about is a Regulated market. Government enforces Property Rights to insure no stealing occurs, thus the market is able to function.

Point Three: What copyright law was designed to do is pretty simple: it was designed to protect someone's unique means of expressing, and perhaps profiting from, the expression of an idea. But it also was designed so that ideas themselves were free to exist, with or without that particular means of expression.

-CRIME AND PUBLISHERMENT....

What can be covered by a Copyright? Well, it has got to be a work product. It is claimed as an Original work product by its creator. Its protection under the law begins the moment it is created. Its creation must not inhibit other's expressions of ideas in the marketplace. That's about the limit to copyrighting.

Your face is not copyrightable. Sorry. Anyone with a camera can take your picture, and copyright the photograph, and sell it to the NATIONAL ENQUIRER. Your tough luck.

Your speech is not copyrighted. Your speech on a particular day, captured for posterity on a tape recorder or by a scribe, may be copyrightable. In order to do so, you must claim that speech as a work specifically originating from you. At the time of the speech, you have created the work, but if you do not claim it to be yours alone, you share it with the world until you do claim it. Once claimed, you have a lot of say over where and how people use your work, even if they were exposed to your work prior to your claiming it.

Hey, could they claim it first? Yeah. In cases like that, you must prove that that particular expression could only have come from you as the creator, and that you meant it to remain yours at the time of its creation. Good Luck, Sport.

This is one reason copyright laws keep changing. The lawmakers try to protect everyone who has a right to the protection, even if the creators/artists, etc. are not being too bright about protecting themselves. It used to be that registration with the U.S. Copyright Office was essential, or your work was considered "dedicated" to the public. But registration was a lengthy process and a bit of a hassle: Forms, fees, copies of the work donated to the Library of Congress....

So the more recent revisions to the copyright code state only that the work has to appear before a significant group of people, say publication in a trade journal or something like that; Voila, it is copyrighted! Or you can claim a copyright the moment something exists as a work: writing "Copyright (C) 1987 By The Author" is considered a notice to the world that you have

total claim on the work. The legal purist will, however, note that in court, a Copyright filed with the Copyright office is generally considered iron-clad Evidence of the history of a work. If you want to make money off your work, you should protect it with the Government's stamp....

The ones who claim the work are generally the creators, unless the creator has in one form or another relinquished his authority to claim the work by giving over that authority to another party. If you submit an article for publication to a magazine (or even Startext), you can claim your copyright prior to its publication. If you do not, it may become property of the publisher. The publisher has an implicit sort of agreement with the person who submits a work. This agreement comes from whether or how you expect to be paid for your work, and under what conditions you restrict their own right to use or re-use their product.

Startext, for example, is a copyrighted work. Everything in it comes under their copyright blanket. EXCEPT: when the author claims the rights prior to the work going online. So, if I want to copyright this column for the Dallas Times/Sinclair Users Group, all I have to do is say so. By doing that, they may choose to publish what for the Dallas Times/Sinclair Users Group, all I have to do is say so. By doing that, they may choose to publish what I volunteered to them, only if they assert my claim and my byline, somewhere noticeable in their issuance of my work. If I don't say so, or I say (C)1987 STARTEXT instead, then I have assigned the copyright to them, and I release them from having to ask my permission if they want to use my work later (to show the talent available to their subscribers!) When the work is theirs, they may choose to defend their right to it as vigorously as they wish... like if it shows up on another pay news-and-information service or BBS.

Well, can you copyright a compilation of other works? Only if the act of compiling is considered at least as much an original effort of creation as the works which appear in it. That stuff works for statistical compilations, for instance. Trivia games are copyrightable. A compilation of disco records you taped from your album collection is not really considered an original effort.

Copyrights apply to literary works like articles, novels, abstracts, reviews, poetry, programs, transcriptions, etc. They apply to artistic works like songs, paintings, engravings, typefaces, charts, photographs, statues, visual designs, etc. They apply to performance works like recordings (audio, video, AND machine-control programs), plays, live performances, speeches, etc.

Copyrights don't apply to general principles or processes, inventions, etc. (Patents cover those types of things). Circuit board artwork is copyrightable, but the circuit itself is not-- though the circuit may be patentable.

Copyright doesn't apply to anything which has been considered dedicated to the Public. You can't copyright the vowels, or the Gettysburg Address (I suppose Lincoln could have, but didn't). A creator can specifically say that a work is to be considered Public Domain. Subsequent copyrighting of that work is invalid. This is the basis for the tradition of Public Domain software libraries and bulletin boards. It is unfortunate that few individuals bother anymore with Public Domain. They just

don't remember what it was like when computers were rare and software was rarer. This is a situation that only software authors can change, if they can overcome their entrepreneurial urges.

Copyrights, like patents, expire. In setting up a monopoly, the government is careful not to begin something it would have to deal with forever. It so happens that this is the trickiest and stickiest thing for lawmakers to decide on, because writers always want to make sure their kids eat, too. For a long while, copyrights had a duration of 56 years, or the lifetime of the author plus fifty years, whichever is greater. Then they changed the law so that you could have a copyright for only 28 years, but could renew it for another 28. Then they changed the law, in 1978, so that the renewal was 47 years: $28 + 47 = 76$ years. Alternately, the life of the author plus 50 years would be the duration. If it was created because someone hired you to create it, another duration came on the scene. Works from organizations and anonymous-types would be protected for 75 years from the publication of the work, or 100 years from the creation.

The reason for going into this is that more changes are apparently going to come out, because nobody is satisfied the law guarantees them a place in posterity. Additionally, if you did something prior to 1978, it is protected differently than something you just created.

-LIFE'S A GAME OF GIVE AND TAKE....

So what CAN a copyright do? It is an assertion of PROPERTY RIGHTS. Like any property, it would be foolish to post "No Trespassing" on something you didn't really care to hold as your own. But once you have claimed your right to the property, it is yours to: publish or reproduce freely, extract from, add to, sell, rent, trade, and control any public (and some private) uses of your work.

In fact, you don't have to defend a copyright in order to maintain the property right safely. If you grant freedoms without restriction to another, however, it is not possible to "take back" your exclusive rights. Most holders, therefore, reserve all rights to themselves, and grant permission to others only if they ask nicely and the argument is strong, perhaps in money terms....

Reproduction or use without your consent as a copyright holder is prohibited. This is true even if it is no longer being published, and is hard for others to get.

-THE WAR ON DUBS....

Gee, how can I be sure I am NOT violating somebody's property rights? What about similar products, like clones and imitations? When can I use copyrighted stuff and NOT violate the law? Imitations first.

A little earlier I said that a copyright should not, in its creation, inhibit someone else's expression of ideas in the marketplace. Boy, what a can of worms! The law doesn't Really specifically say anything like that. But it comes down like this: If it ain't the same idea being expressed, then the similarity of expression is Style alone, Not Copyrightable. If it is the same idea being expressed, a similarity of expression may exist SOMEWHAT. The moment it may be judged to have invoked a real semblance to an existing copyrighted work, even without words or phrases to prove it, you may be on dangerous ground. Imitations, while a sincere form of flattery, are tested legally according to their tendency to suggest the original to the minds of the people

who see it.

Remember K.C. Munchkin? It was a game for the ill-fated Magnavox Odyssey II game system. They claimed that though it looked like Pac-Man and you controlled it like Pac-Man, the rules of the game were sufficiently different-- the plot was changed. The courts felt like everybody who played the game were, in effect, playing Pac-Man, no matter what the box said you were really playing. Was the idea the same or just the style? Did the folks who created K.C. intend to capitalize on the similarities to Pac-Man? You betcha, said the courts. Copyright infringement for sure. My opinion is that they were correct: Sadly, K.C. Munchkin was a fun game and vastly superior to the Pac-Man that Atari was putting out. All K.C. could do was give up the ghost (wocka-wocka-wocka).

Of course, it is a fact of life that there are going to be many similarities of expression among groups of people who share common cultural and learned experiences; but copyright is based on the belief that in democracies, anyway, one hundred minds have at least one thousand ways to approach an idea, examine it, voice it. That belief, does, in a way, make sense. Perhaps when you get to the expressions worked out on machines, however, which have definite ways of working with those expressions, you should be darn careful to make your idea (or the product of it) independent.

And the way the law is dealing with these things is changing. In fact, nowadays, what with some rather sophisticated and computer-literate lawyers, ones who know what SOURCE code, etc. means, the rule about the imitation suggesting the original in the minds of those who see it IS DARN NEAR DEAD, for computerists anyway. The courts are taking into account Program Structure and Code. If the code doesn't suggest the original (meaning they can't find any "lifted" sections of programming in the imitation), the imitation constitutes a new work.

Every P.C. clone machine sold has its own version of the IBM BIOS ROM, and maybe a BASICA compiler-substitute. The BIOS they use is designed to be compatible with all MS-DOS software... that's a selling point. Whether it is on disk or EPROM is irrelevant, just like a book and a tape of the book are the same work. Idea and style are the same, obviously-- the coding, however, is different. For machine-control programs, apparently, that is enough difference to avoid prosecution. Believe me, though, if IBM finds anybody with ripoff CODE, or anyone who duplicates their ROMS, you can bet there will be fight.

Look for a resurgence of the "look and feel" argument if Software Arts wins against Lotus in the multi-million dollar spreadsheet suit. Comparisons of Lotus to K.C. Munchkin? Yup.

Apple Computer claims a patent on the idea of an operating system with a thoroughly integral Icon-and-Mouse user interface. Notice their patent means absolutely nothing to the makers of front-end environments, where the user interface is merely a substitute for working with the base operating system. But they copyrighted their particular icon artwork, too....

-I'D LIKE ONE OF THOSE PICASSOS BY VAN GOGH....

So what can you do with a copyrighted program? If you were to listen to the intimidating advertising done to promote Piracy Awareness, you might come to the conclusion that software remains property of the software houses and you are just borrowing it and you had better not make a copy to back it up. They say Sally

Secretary has become a felon because she duplicated a disk and put it in her desk drawer (never mind that her boss would kill her if she screwed up that \$400 package he just bought). They imply Harry Hacker is a multimillion-dollar threat to America because he doesn't like to pay twice to buy a package, once for the office and once for his Home computer, on which he does work he would otherwise be doing at the office.

What's the real story? Greed. Just like they tried to kill Betamax and VCRs in general. Just like record companies have tried to persuade the public that if they tape a record in their collection to play in their car, they are starving some poor artist. Buy it, buy it again, they say. Right.

-FAIR YOUR USE ONLY....

It will anger some to hear the truth being spoken. You bought a program (or record or tape or whatever) that was a commercial product, yours to use. The copyright prohibits you from making copies to sell or give away. It does not say you can't make copies for your own private use, once you bought the original product. Copyright does not say backups are against the law. Copyright does not say that you as the buyer are not entitled to choose when or where you use the product you bought, once again, as long as you are not making it available to a non-private use. In fact, the only thing that says these things are wrong is the software license that the lawyers of the software company drafted in order to intimidate a potential copyright abuser. The License is a pre-sale contract with the user. Read it. Don't buy software from stupid companies. Keep in mind that breach of this contract is a civil matter; they may choose to sue you over it. Copyright violations are not the same thing, not at all. Copyright violation is a Felony offense.

Backups and additional private use copies are allowed under the copyright laws due to a section in them called FAIR USES. Fair Use was written so that people could properly deal with a work, such as in reviewing or using it for private study. Private use means that if the only market you are spoiling through your actions is YOU, and you already bought the work once, no copyright violation exists. Additionally, Fair use means you in no way are competing with the work itself and what you are doing with the work is for educational, non-commercial purposes, such as extracting portions of a work for reporting on it or the events which surround it.

You are NOT allowed to "spoil a market" for someone else. Don't give away copies. Don't sell any copy (including the original) and keep any part of the work. Don't republish the work or broadcast it in any fashion. Co-workers and friends who want a copy should buy it themselves. But if you abide by these things, the government doesn't care if you personally have made 3000 duplicates for Yourself (one for each of your phobias?). The software companies see this as practically an INVITATION to pirate, so they don't want you aware of the full law. Guilty until proven innocent... that is the motto of some of the companies.

So now that you know... what about compilers? They help you create your programs, but they do this by stringing together little stored pieces of code that they wrote. Can you then sell your stand-alone applications program? Not necessarily. The little pieces are integral to the operation of the compiler and they are a part of the compiler's copyright. They are mostly

unique to the compiler. Now they are a part of your program, too, which is O.K. since you can use the program yourself; but if you are creating a program to sell, you had better darn sure check into the OBJECT CODE DISTRIBUTION requirements the compiler's creator specifies. Some companies demand royalties on any program developed with their product. My favorite compiler is MTBASIC, by Softaid, Inc. Their policy is that you can develop anything you want to and sell it, providing that in the documentation and code of a program you have a credit, such as: "Compiled using MTBASIC. Softaid Inc., P.O. Box 2412, Columbia MD 21045". I don't have any objection to plugging a fine tool I like, so this object code requirement is the kind of thing I wish every compiler maker would take to heart.

What about magazine listings? In the Home Computer world, this is a major source of programs. Need I tell you that most all of them are copyrighted? They were virtually all written by users like you and me, who wished to share them with the community of micro users that could be reached through the magazine. Public Domain style. Then the magazine paid them a five-dollar fee, had them sign a form giving them exclusivity, and published it under the magazine's copyright. The magazine usually has a blurb on the contents page where you would never read it, which states, "Material contained herein is the property of HappyHome Computing, Inc. and may not be reproduced in any form without obtaining express written permission from the publisher." Great. Instead of Public Domain, which can go onto a Bulletin-Board, for instance, we have Fair Use Copyright, which can be typed into your computer but not shared. My feelings on this are that it is not fair, and that it can be licked. The program itself is showing you a Source Algorithm, a solution to a particular problem done up in a language you use on your computer. Now pick up the ball... and rewrite the program completely anew. Sure it is tougher, but the result will be Public Domain. Adapt Commodore listings to your Timex. The resulting code IS NEW CODE. No doubt about it. Your programming skills will be better, too. Change stupid input chains to menus... write a different sort routine. Listings are to learn by, anyway. If all you want is something for yourself, it doesn't matter. If you want to share, contribute ORIGINALLY.

And that's what all this copyright stuff is about. It is simply a matter of keeping the lazy and the dishonest from ruining someone's chances of doing the work and doing it well enough to earn something, even if it's just recognition, as is mostly the case in home computing. And when you write a program, consider the possibility of sharing it with others in the Public Domain, which builds a base upon which education and enlightenment for your computer can grow. Healthy computer communities need people and their programs to show the way. If you copyright, you are part of a market that is regulated and pretty secure-- now all you need is that skill and idea that will set the computer world on its' ear. Good Luck!

<< THIS ARTICLE IS DECLARED SEPARATE FROM THE REST OF THE DALLAS TIMEX/SINCLAIR AMSTRAD USERS NEWSLETTER, FOR THE PURPOSE OF DEDICATING IT TO THE PUBLIC DOMAIN. THE AUTHOR'S INTENT IN DOING THIS IS TO INSURE THE EDUCATION OF COMPUTERISTS EVERYWHERE. >> - and I wanted to make sure there was at least One example of P.D. available....

***** See you at the meeting!

LARKEN ZX-81 DISK CONTROLLER

System Overview
 The Larken disk controller is a easy to use disk system that can greatly enhance the usefulness of the ZX81 or TS1000. It can load a 2k byte program in about 5 seconds. The speed itself is in but the file handling abilities are what can convert your little ZX-81 into a computer that can access programs and data on its own from the disk. Easily.
 It can support 1 or 2 double sided 5 1/4" disk drives. The board is connected to the ZX81 with a ribbon cable (supplied) and requires a 3 volt power supply. The disk drive will require 5 and 12 volts. A ZX-81 compatible connector is on the board for adding peripherals. It is the main part of any disk system and the Larken dos (LDOS) has many features that you want to know about. LDOS is a disk system or some 2068 disk systems. LDOS manages the disk efficiently, meaning that the amount of disk space used when you save a program, is proportional to the size of the program.
 Disk capacity is 160k bytes. This may seem less than some of the competition but because of the way the disk is managed, you can usually put far more programs and useful data on a Larken disk than on some of the competition's who offer 360k disk capacity but only format the disk into 6 to 10 very large "pages".
 You can put up to 52 files on a Larken disk. Also files are automatically placed on disk where ever there is room. The dos also maintains a directory on the disk that can be accessed by the Directory command. The Directory command displays the names of all the files on the disk, the amount of disk space used by each file and the amount of free space left on the disk.
 Disk commands can be executed from within running programs or from the LDOS monitor. The following commands are supported:
 Load File, Save File, Delete File, Directory and Exit. Also disk copy and drive select routines.
 More commands will be available on disk soon. These will include Copy, and Move.
 Three types of files are supported: Basic programs, Arrays (numeric or string), and Blocks of code (no other storage device for the ZX81 can do this). The "EX" in the file name is the extension telling the dos what type of file it is. from basic if the dos is always entered by a user, 14336 command, the Ldos you enter directly from the keyboard, you will enter the Ldos monitor where you can execute dos commands directly.
 The way you execute dos commands from within running programs is to have the command in a REM statement following the user call eg: 100 REM USER 14336
 Programs can auto-run and because one basic program can load an other, you can make programs that are larger than 150k.
 The dos also uses 12288 to 14336 memory located to 8kdec. The disk controller is almost 2068 compatible. Also data on disks can be modified to work on between each other.
 The Larken disk controller is compatible with most other ZX-81 peripherals (printers, cassette decks etc). A few peripherals that use the 12 to 16k area of memory such as the "hunter" board or 64k ram without switchable 0-16k area may require a small modification. After the Larken board or the peripheral (details available).
 A 2068 ZX-81 cassette software can easily be put on disk. After you purchase a single drive controller, it can be easily modified to dual controller at a later date.
 Documentation is included and there is a 60 day money back guarantee.

Prices:
 Single disk controller - \$95.00 (US)
 Double disk controller - \$99.00 (US) Please add \$5 for shipping
 Disk ribbon cable (1 drv) \$5.00
 Disk ribbon cable (2 drv) \$7.50

LARKEN 2068/SPECTRUM PRODUCTS

LKDOS -EXTENDED BASIC Cartridge is fully Spectrum compatible. It resides in the cartridge dock but is not a LROS or AROS. It shadows an area of the Sinclair Rom and takes over control when LKDOS commands are used. Other cartridges such as the OS-64 or Spectek-EXPC use none of your program ram as it has its own 8k and 8k rom on the cartridge.
 All commands LKDOS or Extended Basic use standard keyboard com - LKDOS print support by PRINT #; eg: PRINT #4: FORMAT "diskname", "diskname" available in the near future. The dos automatically keeps a catalog of all files on disk and takes care of all file space allocation etc. Basic Code and Array file types are handled the same way as the cassette.
 Commands for LKDOS are LOAD, SAVE, CODE ARRAY, SCREENS, MERGE, LINE CAT, FORMAT, MOVE, ERASE, VERIFY, PRINT, GOTO.
 Also any program can be transferred to disk with the push of a button (Using NH1 save push button on disk interface).
 Extended Basic commands are regular commands redefined when proceeded by the PRINT #4:
 Eg: PRINT #4: CIRCLE x,y (pattern) -is now a graphic fill command with 10 different patterns. windows, Box clear and fill Other commands include; Disk, Printer and screen, Line Number, B, Channel opening for Disk, Paper and Clear, Pixel and Byte Scrolls variations of Poke and Clear, Pixel and Byte Scrolls in 4 directions and other available for the RAMEX disk sys and this cartridge is also available for the RAMEX disk sys and other disk systems in the future. Also *see R Olgier*

NEW 400K/2068/Spectrum Disk Interface (DSK-400)
 This double density disk interface will put 400K on a double sided 40 track drive. It can control up to 4 - 3 1/2" or 5.25" single sided, double sided, or that density drives. This board is a compact low profile design that connects to the rear buss on the 2068 and has a 3 pin connector. It can load 32K in less than 5 seconds. The NEW thru control pushbutton is on the board and there is also a KEMPSON compatible joystick port on the board. The LKDOS cartridge is used to control this interface.
 The LKDOS cartridge is used to control this interface will give you a 2068/Spectrum disk system second to none.

ZX81 / TS1000 Disk Controller Board
 This disk controller for the ZX81/TS1000/1500 will put 160k on a double sided 5 1/4" drive. It attaches to the computer via a ribbon cable and a control 2 drives. It can also be used on the 2068 if the LKDOS cartridge is also installed.
 For the ZX81 the Ldos on the interface provides 6 commands. Basic they are LOAD, SAVE, DIRECTORY, DELETE, FORMAT, and EXIT. Basic Arrays and Code files are also supported. (This board is great if you use both 2068 and ZX81)

256k RAM DISK
 This memory extension will be as easy to use as a Floppy disk or tape recorder. The PRINT #4:GOTO (device) commands used to direct the Dos to Floppy disk or Ram disk. All LKDOS floppy disk commands are treated the same for Ramdisk. It can be used with the Floppy disk interface or without. The new 32k static ram LKDOS cartridge to access it. It will use up the board will be supplied with 32-64k and the user can add extra ram (up to 256K) if it is needed.
 Because it uses standard cassette commands it can be useful with most current software. It should be available by spring 81 if you are interested in this device, I can put you on my info when ready list.

PRICES ---
 LKDOS EXTENDED BASIC cartridge + 400K Interface \$65.00
 400K System Cartridge \$19.00
 ZX-81 Disk Controller \$99.00
 256K Ramdisk (with 1-32k chip) \$60 - \$80
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 Disk Editor and Utilities (2068) (add \$5.50)

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Jack Dohany
398 Rutherford Ave
Redwood City, CA 94061

(415) 367-7781
March 1987

JACK'S FAIRWARE

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-My time & costs of copying & mailing documentation & tape etc
-Complexity, quality and usefulness of the software or support

FAIRWARE AUTHORSHIP: Some fairware originated in British magazines, from whence I typed it in (hours of work), got it working (more hours) and then adapted it for 2868 (more hours).

Other fairware was written by myself or by others. If by others, it is included in the FAIRWARE catalog with permission, and donations received for the work of authorship will be forwarded to the author. Support is provided either by myself or by the original author.

SUPPORT: Ideally, a program should be so well written and so well documented that no support by the author is ever needed. But in the real world, support is often needed either because the user is a beginner or because the user has other software or equipment with which the author's software is incompatible.

There are SO MANY different peripherals and accessories available for the 2868 that it's very difficult to write software that's compatible with everything a user may own.

THE FAIRWARE CATALOG is a list (and brief description) of currently-available Fairware. The latest catalog will be sent upon request; SASE please.

A mailing to everyone on my mailing list will ONLY be done when a significant number of changes have accrued since the last mailing. When you receive a catalog in such a mailing, please send me a dollar to help with the copying/mailing costs, and to let me know that you want to remain on my active mailing list.

THE CATALOG DESCRIPTIONS are very brief. If you are curious as to whether something may be useful to you, just go ahead and order it. If you find it is NOT useful to you, DON'T pay for it. (But do pay for the cassette/mailing, or return the cassette). Generally it's best if you order several programs at once.

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FAIRWARE CATALOG

Jack Dohany
398 Rutherford
Redwood City, CA
94061

*** FAIRWARE CATALOG ***

March 1987
(415) 367-7781

CUSTOMIZED MBCRIP (V5) (Copyright MICRO SYSTEMS INC.)

- with enhancements by Jack Dohany and others
 - Varieties: M55A for A&J MICRODRIVE or cassette
 - M55D for AERCO DISC or cassette
 - M55T for CASSETTE ONLY
 - M55Z for ZEBRA DISC or cassette
 - You must already have purchased a legal copy of MBCRIP.
 - Includes built-in cataloger with text-appending capability.
 - A host of features too numerous to list here.
 - V6 to be available by March or April '87, I hope
- Latest version is 5.2 (March '87), which corrects some V5 flaws which kept SOME printers from working properly, and permits 2 kinds of program backup: with or without text.

CONVERTM by Jack Dohany

- Entirely in BASIC, slow, but user-modifiable
- Converts an MBCRIP textfile to/from BASIC character array AS

RELOCATABLE AERCO PRINT DRIVER (V4) by AERCO and Jack Dohany

- "Relocatable" means the machine-code driver may be loaded and used at more than just one area of memory, to avoid conflicts.
- Allows the Aerco Centronics interface to be used with many different programs.
- works in Spectrum or 2868 mode.

BASIC DISASSEMBLER (V1) by Simon Boodwin (ZX Computing 6-83)

- For Spectrum or 2868, and for machine-code buffs
- A public-domain disassembler written in BASIC.
- includes MDN (V1) by Jack Dohany for fancy peek-poking.

CAT (V1) by Jack Dohany

- lists/ prints file headers from cassettes/A&J or cassette/AERCO disc. Specify A&J or AERCO disc variety: CATa or CATD.

LISTER (V1) by Jack Dohany

- Relocatable machine-code for 2868 and SPECTRUM
- lists all or part of a BASIC program to screen or printer in a more legible way than provided by LIST or LLIST commands

TOOLKIT (V1) by John Charlesworth (Your Computer 4-84)

- Relocatable machine-code routines
- Renumbers, compacts, kills REMs, lists variables.

EZEDIT (V1) by David Wright (Sinclair User 6-85)

- Renumber, Copy, Find, Auto Line Numbering etc.
- Includes SPECTRUM and 2868 versions.
- requires 10K data line resistors which Spectrum has and stock 2868 lacks; fully documented.

EXTENDED BASIC by Robert Newman (Your Computer 9-84)

- Complex machine-code utility, but pretty easy to use.
- Adds nine new BASIC commands, for SPRITE GRAPHICS management.
- For 2868 only; Spectrum version available soon.

KEYWORD (V2) by Blyn Kendall, YC 6-84

- Allows BASIC commands to be typed out, rather than entered as keywords. No need to look for commands on keyboard. Essential for add-on keyboards that don't have keywords on keys. V1 had bugs, now eliminated in V2. For 2868 only; Spectrum version available soon.

GRLE (V1) by Jack Dohany

- a QUICK RLE FILE encoder-decoder. RLE stands for "Run-Length Encoded Graphics File", which is a picture that can be sent or received via modem. Specify GRLE1 (for cassette only), or GRLE2 (for AERCO DISC or cassette.)

BA64 (V1) by Duane Ruck and Jack Dohany

- 64 columns in BASIC
- For 2868 with AERCO DISC ONLY
- includes big-printer support software

FONTS (V1) by Jack Dohany. A font manager in BASIC and MC which

- includes 28 fonts of 96 8x8 characters. Specify variety: T FONTS for cassette
- DFONTS for AERCO disc
- FONTS* for AERCO disc and BA64

CUSTOMIZED VU-CALC by Jack Dohany

- specially for big printers
- you must be a legal VU-CALC owner

*customize masterfile 49
-- for Aeco Disc + Big printer*

A C C U D R A W T 2

By G. Paul Jones

AccuDraw T2 is a software drawing tool with appeal to both the artist and the engineer in you. It has some drafting capabilities, and many features such as 'rubber-banding' elements, two undo functions, color control, and scaled dimension readouts which will allow your 2068 to compete favorably with much more expensive computers.

AccuDraw's graphics cursor is driven at 2 speeds by a one handed joystick or a 'contact mouse'. Two display files are employed which may be paged at will with objects on the two screens indexed via full screen cursor driven crosshairs.

AccuDraw asks you the drawing size in inches, kilometers, etc. and then displays the dimensions of each new element in those units, and angles in degrees, allowing design accuracy in floor plans, circuit layouts, three-views, etc. It is an electronic equivalent of a drafting machine.

Also, the 2068's low resolution colors may be 'edge filled' for excellent artistic application. Two sizes of printed display are available. Two more with core-ident printer drivers. (Aerco Cif & Epson compatible printer supported, otherwise, save and exit AccuDRAW to print). Artwork samples are included with AccuDRAW. Drawings done with AccuDRAW are compatible with and may be re-edited with any other graphics editors for the 2068.

KEYBOARD FUNCTIONS

- a- arc; bend current line, 2 speed (after point & line)
- b- box / rectangle, elastic
- c- circle (after point, conditionally elastic)
- d- duplicate and translate object (after box)
- e- erase 4 sizes
- f- freshhand draw/ erase (spacebar erases)
- F- fill object with ink
- g- user defined graphics select (space bar inverts)
- h- bright grid for color manipulation
- i- inverse video of 8x8 pixels
- I- color 'edge fill'
- k- color; ink & paper select (transparent supported)
- l- line (after point), elastic
- m- move / drag line or rectangle
- n- function reference menu, windowed
- n-g-w- erase current display & return to main menu
- o- establish origin for relative dimensioning. Crosshair cursor
- p- toggle OVER status (OVER 1 default)
- r- rotate & translate object (after box, 90 deg.)
- s- use with arc to bend other way (sped with button)
- S- save current video page as SCREENS
- t- text, std. font (enter at end)
- T- text, bold font
- u- undo, return to stored screen
- v- video page (switch to other display file)
- w- wide lines, boxes, circles
- x- full screen cursor driven crosshairs
- y- spray stippling
- Z- copy screen to 2040 or to impact printer if fitted
- Z- copy screen rotated & twice size to impact printer
- <->- mirror and translate object
- Enter- keep drawn element
- Button- 2 speed cursor

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A C C U D R A W T 2

WRITTEN BY PAUL JONES

M E N U

GENERAL DRAFTING
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LOAD OTHER UDG SET
PAPER COLOR DRIVER
LOAD OTHER PRINT DRIVER

ACCUDRAW T2 Order Form

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Yes, please send by copy of the AccuDRAW cassette and manual to!
(please print or type)

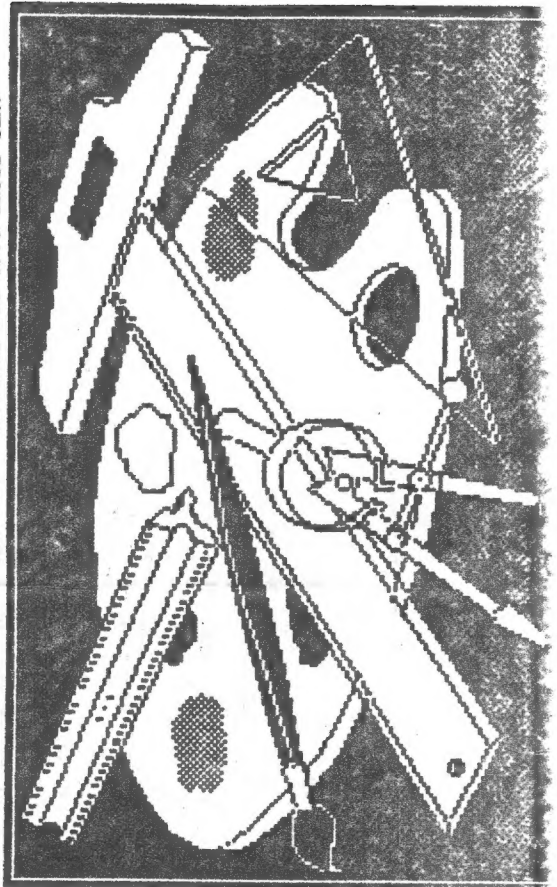
NAME _____

ADDRESS _____

CITY _____ STATE _____

ZIP CODE _____

Enclose check or money order for \$19.95 (includes 8th), payable to GLENN Technics. (Calif. residents add 1.05 sales tax)



A CURSOR PAD

A neat way of selecting from a menu or a collection of items on the screen is to move the cursor to the desired item. There is nothing new about this idea—many games and commercial programs use this technique. On our keyboard, moving the cursor is somewhat awkward: hold the cap shift down while pressing 5, 6, 7 or 8. Some of our more expensive cousins have special keys for moving the cursor.

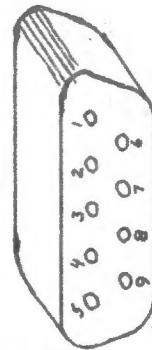
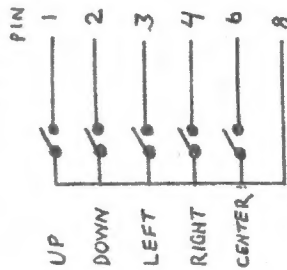
The cursor pad described here simulates these special keys. It plugs into a joystick port and, with appropriate software, moves the cursor around the screen.

The gadget consists of a small plastic box (mine is 2" by 3" by 1"). Mounted in the top are 5 normally-open push button switches. Four are in a diamond pattern: up, down, left, right. The fifth is in the center and acts as the ENTER key. All these are available at Radio Shack.

For the plug that attaches this to the joystick port, I found an elegant solution at Toys'R'Us!—an extension cord for Atari joysticks. I cut this in half, and used the female end for the cursor pad. Wes Brzozowski described an alternative plug in his Light Pen article in Sep/Oct '86 SINCUS NEWS.

In this example of the software I use, the cursor moves vertically only. Statements 400-500 simply create and display a list of items; your own program would obviously have a different list. The subprogram that controls the cursor is in statements 200-280. This routine requires values for K and L, which set bounds to the movement of the cursor, and which are supplied by statements 110 and 120. When the center key is pressed, the cursor pad subprogram returns in I the number of the selected item.

Try it, with your joystick in the right-hand port!

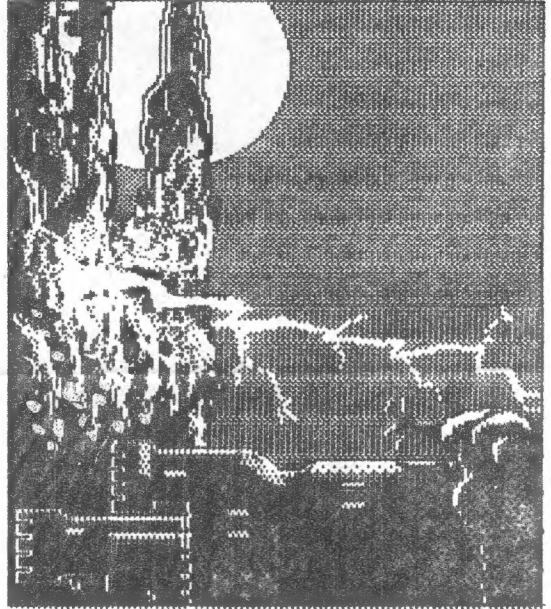


PIN NUMBERS
FACE OF FEMALE PLUG

```

1>REM ** CURSOR PAD DEMO **
2
50 GO SUB 400
60
100 REM SET CURSOR BOUNDS
110 LET K=2: REM ROW # OF FIRST ITEM
120 LET L=11: REM ROW # OF LAST ITEM
130 GO SUB 200
140
180 REM USE SELECTION
190 CLS : PRINT A$(I): STOP
199
200 REM CURSOR PAD
210 LET I=L: OVER 1
220 GO SUB 280
230 IF STICK(1,2)<>0, THEN GO SUB 280: GO TO 260
240 IF STICK(2,2)=0 THEN GO TO 230
250 GO SUB 280: OVER : LET I=I-K+1: RETURN
260 LET I=I-(STICK(1,2)=1 AND I>K)+(STICK(1,2)=2 AND I<L)
270 PAUSE 10: GO TO 220
280 PRINT AT I,0: INVERSE 1: " ": RETURN
299
400 REM CREATE LIST
405 DIM A$(10,7)
410 FOR I=1 TO 10
420 LET A$(I)="ITEM "+STR$ I
430 NEXT I
440
500 REM DISPLAY LIST
510 PRINT "SELECT ITEM": PRINT
520 FOR I=1 TO 10
530 PRINT A$(I)
540 NEXT I
550 RETURN

```

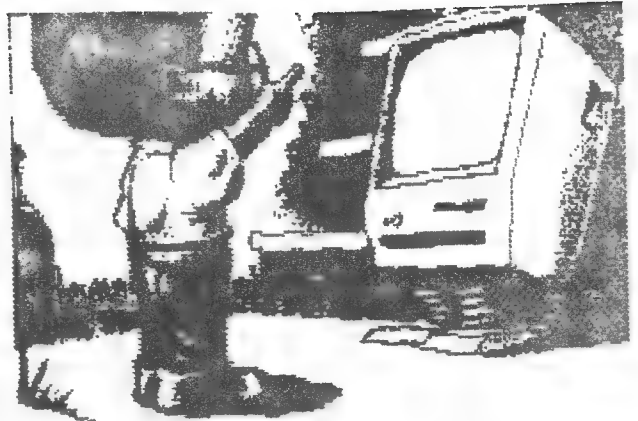


<--Artwork screens via Pete Fischer-->

These two pages are filled by new members, Joan Kealy of El Paso, Texas and Hal Bellinson of Troy, New York. If everyone reading this now would mail in one or two short programs or ideas, this newsletter would quickly become a national bulletin board for 2068 users. Thanks to Joan and Hal, and I know you will be seeing more of their efforts over the next several months.

The little fellow on the right could be saying just about anything to his computer! Fill in the blank and we'll print some of the more original sayings!!

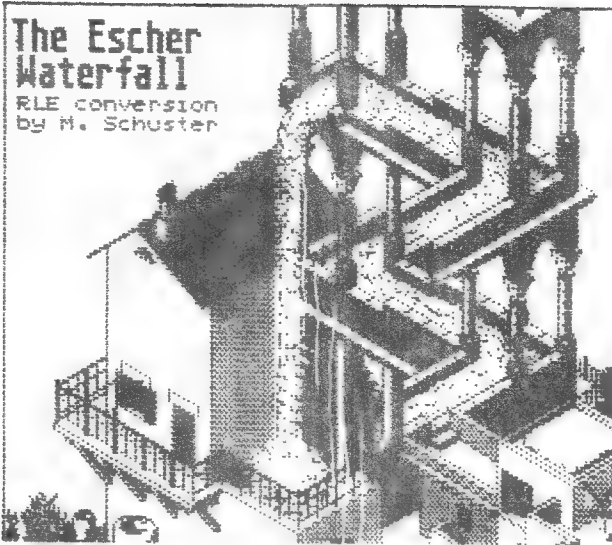
"Just do what I tell you to do, will ya fer \$20000!crying out loud"



```
1 FLASH @: CLS : POKE 23658,8
: INPUT "FIRST USE? Y/N",I$: IF
I$="" THEN GO TO 1
3 IF I$="Y" THEN GO SUB 8000
5 LET TOT=@: INPUT "NUMBER OF
CO.s REPRESENTED ";T
10 POKE 23692,255: PRINT "NAME
# SHARES PRICE VALUE"
15 DIM P(T): DIM V(T)
18 FOR N=1 TO T
20 PRINT N$(N);
30 PRINT TAB 12;S(N);
40 INPUT "current price ea. ";
P(N)
50 LET V(N)=S(N)*P(N)
60 LET TOT=TOT+V(N)
70 PRINT TAB 18;P(N);TAB 25;V(
N)
75 NEXT N
80 INPUT "Want a COPY from TS2
040? Y/N",C$: IF C$="" THEN GO T
0 80
85 IF C$="Y" THEN LPRINT "
PRINT = LPRINT " T A K I N G
T O C K " : LPRINT
86 LPRINT "NAME SHARES
PRICE VALUE": LPRINT : LPRIN
T
87 FOR N=1 TO T: LPRINT N$(N);
" ";S(N);TAB 18;P(N);TAB 25;V(N
)
89 NEXT N
176 PRINT "PRESS ANY KEY": PAU
SE @: CLS : PRINT AT 10,5;"NOU F
OR TOTAL TODAY": INPUT "DATE IN
NUMERPLS?MONTH ";M;" DAY ";D;" Y
EAR ";Y
178 PRINT "*****
*****": PRINT "TOTLVAL
$";TOT;" DATE: ";M;" / ";D;" / ";Y
180 LPRINT "*****
*****": LPRINT "TOTLV
AL $";TOT;" DATE: ";M;" / ";D;" /
";Y
185 STOP
8000 PRINT "YOU WILL NEED STOCK
MARKET PRICEQUOTATIONS FROM NEUS
PAPER, LIST OF COMPANIES WITH WH
ICH YOU OWN STOCK, AND NUMBER OF
SHARES."; "YOU WILL ENTER CURRE
NT PRICE & COMPUTER WILL PRINT
THE CURRENT VALUE OF THAT BLOCK
OF STOCK & THEN VALUE TOTAL FOR
ALL STOCK YOU OWN ON THAT DATE
"
```

```
8005 PRINT "BUT FIRST"; "YOU U
ILL BE SAVING THE COMPANY NAMES
AND NUMBER OF SHARES IN A STR
ING ARRAY AND AN ARRAY SO BE AC
CURATE. HENCEFORTH, YOU WILL
ONLY NEED TO ENTER CURRENT PRICE
IN TABLE FOR COMPLETE COM-PUTAT
ION."
8006 PRINT "PRESS ANY KEY": P
AUSE @: CLS
8008 PRINT "IF YOU ARE USING A
TAPE, YOU'LL NEED TO RECORD POSI
TION # ON TAPE CAREFULLY OR L
EAVE A BLANK AREA EQUAL TO LENGT
H OF THIS PROGRAM AND RECORD
THIS PROGRAM AHEAD OF TWO DATA S
AVES SINCE THEY WILL LOAD FROM
WITHIN THIS PROGRAM."
8009 PRINT "SINCE MAX OF CORP.
NAMES IS 10 LETTERS, YOU MAY WA
NT TO USE THESTOCK MARKET ABBREV
IATIONS FOR THE COMPANY ISSUE."
8010 PRINT "PRESS ANY KEY": PA
USE @: CLS
8012 INPUT "TOTAL NUMBER OF ENTR
IES (USUALLYTHE NUMBER OF DIFFER
ENT) CORPOR- ATIONS INVOLVED) ";T
8014 PRINT AT 19,0;"YOU WILL BE
ASKED TO GIVE THIS TOTAL ENTR
NUMBER ";T;" AGAIN IN THE MAIN P
ROGRAM": PAUSE 360: CLS
8020 DIM N$(T,10): DIM S(T)
8025 FOR N=1 TO T
8030 INPUT "NAME OF COMPANY ",N$
(N)
8035 INPUT "NUMBER OF SHARES ";S
(N)
8040 NEXT N
8050 SAVE "STOKNAMDAT" DATA N$( )
: SAVE "SHARNUMDAT" DATA S( )
8060 RETURN
9990 STOP
9995 CLS : PRINT INK 9;"LOADING
TWO DATA ARRAYS": LOAD "STOKNAMD
AT" DATA N$( ): LOAD "SHARNUMDAT"
DATA S( ): GO TO 1
9998 SAVE "STOKVALU" LINE 9995:
STOP : REM DO NOT USE THIS SAVE
UNTIL YOU HAVE SAVED TWO DATA AR
RAYS.
9999 SAVE "STOKVALU" LINE 1: REM
ALL-PURPOSE SAVE FOR LATER INVE
STIGATION OF PROGRAM
```

The Escher Waterfall
 RLE conversion
 by M. Schuster



<--<--Artwork screen via Pete Fischer

A Big Thanks goes to Richard Hurd for the sharing of info on how he hooked up his disc drives with his Larken disc IF, and for a formatting utility for the 3" disc system. Sharing what we learn helps us all, and this is what the TS user community is all about. Richard also had a request; does anyone have a Spectrum/2068 conversion table?? The ones in particular are:

LABEL	Spectrum Address(Hexadecimal)
RECLAIM_2	19E8
MAKE_ROOM	1655
TENPS	0D4D
NEXT_2NUM	1C79
STK_TO_DC	2307
CO_TEMP_3	21F3
EXPT_STRING	1CDC
EXPT_2NUM	1C7A

WE WILL PUBLISH ANSWERS IN THE NEXT ISSUE TO HELP OUT NOT ONLY RICHARD, BUT ANYONE ELSE WISHING TO LEARN.

10 REM 42 TRACK CONVERTER FOR THE AMDISK III & LKDOS by Richard Hurd

```

20 POKE 23658,8: REM CAPS ON
30 CLS : PRINT "1) CAT""2) CONVERT""CHOOSE ONE"
40 IF INKEY$<>"" THEN GO TO 40
50 IF INKEY$="" THEN GO TO 50
60 LET A=CODE INKEY$: IF A<49 OR A>50 THEN GO TO 30
70 CLS : PRINT #4: CAT ""
80 IF A=49 THEN PRINT #1;AT 0,5;"Press SpaceBar For Menu": PAUSE 0: RUN
90 LET save=40015: REM save buffer to disk
100 LET load=40012: REM load disk into buffer
110 LET Sprt=40009: REM Send Drive data to port
120 LET setrk=40003: REM move head
130 LET trac=43300: REM trac # MC variable
140 LET Drv=43301: REM Drive # MC variable
150 REM LOAD TRACK
160 POKE trac,0: POKE drv,2: RANDOMIZE USR setrk
170 POKE drv,2: RANDOMIZE USR sprt: PAUSE 20: RANDOMIZE USR load
180 REM ALTER DIRECTORY DATA
190 BEEP .1,10
200 POKE 45021,42: POKE 45104,80: POKE 45106,82
210 REM SAVE TRACK
220 POKE trac,0: POKE drv,2: RANDOMIZE USR setrk
230 POKE drv,2: RANDOMIZE USR sprt: PAUSE 40: RANDOMIZE USR SAVE
240 CLS : PRINT #4: CAT ""
250 PRINT #1;AT 0,0;"ANOTHER? YES OR NO"
260 IF INKEY$="" THEN GO TO 260
270 IF INKEY$="Y" THEN RUN
280 STOP
290 BORDER 7: PAPER 7: INK 9: CLS
300 PRINT "40 TRACK TO 42 TRACK CONVERSION FOR THE AMDEK AMDISK III FDD"
310 PRINT ""This routine LOADs the Directorytrack into Ram, converts it to 4
2 tracks, then SAVES it back todisk."
320 PRINT ""Work is done on Drive #0 ONLY!""Make sure that the Write Protect
Tab is OFF!"
330 PRINT ""TAB 3;"Press SpaceBar To Convert"
340 IF INKEY$="" THEN GO TO 340
350 RUN
360 PRINT #4: LOAD "Fcode.CL"CODE : CLEAR 39999: GO TO 290
370 PRINT #4: SAVE "40-42.B1" LINE 360: PRINT #4: SAVE "Fcode.CL"CODE 40000,100

```


I just received a Larken FDD System and ran into a few minor problems with connecting the AMDEK AMDISK III, a 2 drive disk system with power supply all tucked into a compact case. It is a single sided drive though both sides of the disks can be used, the AMDISK "drive-on" indicator lights are green when side 1 of a disk is read from or written to and red for side 2. I received the AMDISK from Peripherals Direct (1-800-332-9988) for \$45 + \$5 s&h. The 3" disks are still going for; 5 for \$21 or 10 for \$39.

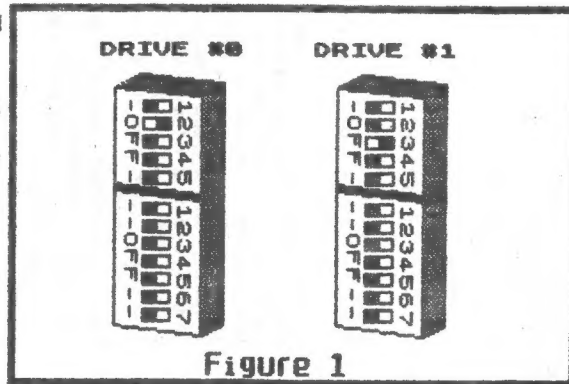


Figure 1

I already had the AMDISK when the FDD I/F arrived and the first thing I noticed was that the cable that had come with the AMDISK would not work. I called Rod Gowen (RMG) and he said he had the cable I needed, in stock and he also was a big help in explaining how to go about removing the old and installing the new cable. You have to remove the 5 screws that hold the cover on, then the cover. Remove the centronics connector (I also removed the bracket the connector attached to), unplug the card edge connectors from both drives. I don't see why you couldn't use the ribbon cable that came with the AMDISK and remove the centronics connectors and install new edge card connectors, available from Radio Shack \$3.95 each and you'll need 3. The Larken Operating Manual describes in detail how to install the new connectors.

I thought that maybe replacing one end of the centronics cable with an edge card connector (for the FDD I/F) would solve the problem. So, first, I dug out the multi-tester and checked the continuity of the edge card connectors (to each drive), and found that a couple of the wires were mixed up. They will not work on the Larken System this way. I was told that the edge card connectors that came with the AMDISK are not reusable. (Once they are disassembled, they fall apart!) An alternative is to get a 2 Drive FDD I/F cable from RMG for \$19.95 and simply plug it in.

The AMDISK arrived without a owner/operator manual. When I pulled the cover off the AMDISK, I noticed that each drive had 2 dip switches (DS). See figure 1. One, 7 switch DS and one, 5 switch DS on each drive. The 7 switch DS on both drive's were all switched OFF. The 5 switch DS on both drive's were switched #3 ON the rest OFF. This setting did not work at all when I tried to test the system out. So, first I disconnected one of the drives and tried it again, it worked fine with one drive. (Either one.) So I ran the Larken system for an hour or so, easily transferring quite a few of my most used programs to disk. Well, I just had to experiment with the dip switches. I found I only had to change drive #0's 5 switch DS. Figure 1 shows the setting I came up with. I plugged in both edge card connectors and tried it out, it worked great. I tried out the disk copy program (Copy2D.B1), no problem!

The AMDEK AMDISK III seems to be a very nice system. The biggest drawback is of course, the cost of the diskettes. It didn't take me long to fill 5 of them. I'll be looking into substituting a 5.25" single sided drive in place of one of the AMDEK's drives using its' power supply.

To convert 40 track formatted diskettes to 42 formatted tracks:

1. FORMAT a 3" diskette to 42 tracks
2. COPY the 40 track diskette to the 42 track diskette
3. Use the utility 40-42 to convert the directory track

The alternative is to FORMAT the 3" diskette to 42 tracks to begin with. Which a person can do if they know it is possible.

SINCUB EXCHANGE TAPE # 102

*** Utilities SIDE A ***
 *** Business SIDE B ***

SIDE A - Utilities

No.	Name	Type	Size	Description
1	HEADER	Basic	2K	Header reader
2	sortword2	Basic	2K	Word sorter in bold print
3	boldprint	CODE		At 57786,100
4	printscan	Basic	1K	'Shoots' titles on screen
5	seescan	Basic	1K	Graphic of computer memory
6	TAPE LABEL	Basic	3K	Label maker for Cassettes
7	ROMCHECK	Basic	1K	Checks ROM in 4-minutes
8	banner3	Basic	1K	Banner maker w/ various sizes
9	font111	Basic	1K	3 fonts-can be used w/banner3
10	doodlejoy	Basic	1K	Simple drawing w/ joystick
11	anatomy	Basic	1K	Organization of prog. file
12	qr1for2068	Basic	3K	RLE en/decoder and more!
13	qr1for2069	CODE		At 30400,400
14	analysr	Basic	1K	Reads 2068/Spec. tapes-Spectr.
15	64COL-P	Basic	2K	Type in 64 column mode
16	D_C	CODE	27K	85 column demo/Dragon's Comp.
17	D&Ctimes85	Basic	3K	Scroll anyway you want!
18	SCROLLS	Basic	2K	Programs 2068 music
19	Sound Pro	Basic	14K	Spectrum assembler
20	DEV-Assem	Basic	1K	Renumbering routine
21	RENUMBER	Basic	4K	Various toolkit routines
22	toolkit	CODE		At 63350,2019
23	64 cols	Basic	3K	64 column demo
24	code!!	CODE		At 60000,800
25	arcSCRATCH	Basic	2K	Drawing program
26	WESPpp	Basic	3K	Proportional printing program
27	Sprite	Basic	3K	A bug in your basic
28	Aercopatch	Basic	3K	D. Schoenwetter's Aerco patch
29	3D WORDS	Basic	8K	Print's 3D words
30	TIP8-A-H	Basic	34K	Joan Kealy's T/8 tips A-M
31	TIP8ITBCR	Screen		
32	TIP8-N-Z	Basic	30K	Joan Kealy's T/8 tips N-Z

SIDE B - Business

No.	Name	Type	Size	Description
1	B99	Basic	20K	Integrated business programs
2	checkbal	Basic	2K	Checkbook balancer
3	typist	Basic	3K	Typing tutor
4	certificat	Basic	3K	Certificate maker w/borders
5	loancompar	Basic	1K	Figures loan & total payment
6	gradebook	Basic	4K	Teacher gradebook
7	lifeinsur	Basic	3K	Life insurance estimator
8	piechart	Basic	1K	Pie chart w/up to 18 subdivs.
9	Stat.Anal.	Basic	26K	Scientific statistical analy.
10	UNIFILEII	Basic	7K	Good BASIC filing program
11	CALCULATOR	Basic	5K	A calculator for the computer
12	sortize	Basic	10K	Accounting functions
13	file	CODE	16K	User group file - from SINCUB
14	file	CODE		At 57786, 30
15	file	CODE		At 65368, 168

SINCUB EXCHANGE TAPE # 101

*** Entertainment ***

- SIDE A -

No.	Name	Type	Size	Description
1	belltower	Basic	15K	Like Jet Set Willy - 5 rooms
2	pigpicks	Basic	1K	Football prediction program
3	buster	Basic	7K	Good minefield game
4	MONIMATION	Basic	9K	Demo - animation in basic
5	sheepdog	Basic	8K	Bring the sheep home
6	3DTICTACTO	Basic	9K	3-dimensional tictactoe game
7	aliens	Basic	4K	Get them before they get you
8	kitchens	Basic	4K	Fun in the kitchen game
9	messiah	Basic	3K	'Sound' from Handel's Messiah
10	math	Basic	2K	Math practice for kids
11	golf	Basic	1K	Easy golf game - 9 holes
12	hangcat	Basic	2K	Hangman type word game
13	concentrat	Basic	2K	Concentration game for 2068
14	biorthythes	Basic	1K	Check your biorthythes
15	MUSIC	Basic	21K	Many traditional songs
16	saucers	Basic	4K	Defend the city from saucers
17	spacean	Basic	4K	Paceman type game
18	earth	Basic	2K	Sight 'em and shoot 'em!
19	tictctoe	Basic	9K	Traditional game
20	Saturn	Basic	3K	Land on Saturn - if you can
21	Poker	Basic	11K	Traditional card game
22	Swam	Basic	8K	Don't let the bees get you
23	KING-KONG	Basic	7K	Avoid that gorilla!
24	CHARACTERS	CODE		At 65368,144
25	Tennis	Basic	7K	Tennis anyone?
26	Driver	Basic	2K	Stay on the road!
27	Mission	Basic	10K	Save the world with 2068's
28	Cricket	Basic	7K	Not for Englishmen only!
29	New York	Basic	3K	Help save New York from aliens
30	Pipeline	Basic	16K	Pattern your way to victory

- SIDE B -

No.	Name	Type	Size	Description
14K	Land that ship-good graphics	Basic		
31	lander	Basic		
32	asteroids	Basic		
33	Submarine	Basic		
34	MoneyFall	Basic		
35	Bricks	Basic		
36	Chomper	Basic		
37	Las Vegas	Basic		
38	Worksimul	Basic		
39	Demolition	Basic		
40	Maze	Basic		
41	ELIZA	Basic		
42	ELIZA	Code		

←

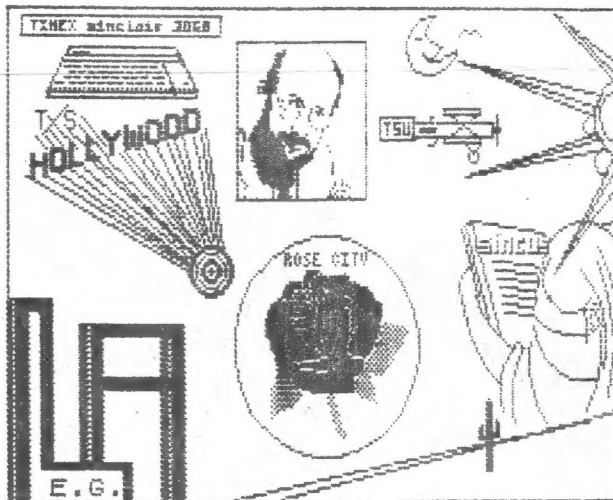
To SWAP or EXCHANGE programs- send us a 60 minute tape in a reuseable package. Copy or make up 3 programs for the 2068 or Spectrum. Provide enough documentation to get a user started either in REM or on paper. State your preference for our swap tape #1 or #2, include your return address. Mail to: John Colonna, 28 Guilfoyle Avenue, Binghamton, NY 13903

To BUY a tape, send a check or MO for \$4 for one, \$7 for two to John Colonna, 28 Guilfoyle Avenue, Binghamton, NY 13903, allow 60 days for shipment. The little left over goes to support the swap program postage.

Tape Number 3 is in the works, but don't send requests until you read of it in this newsletter, Thank you.

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I received this letter this past month, in the sixth paragraph I felt somewhat honored being the ONLY one so selected to help these people out. This didn't last long, our swap from the Chicago TSUG arrived and lo and behold if they weren't similiarly honored. They reported this letter to the FBI, and the next thing I read is the US Commerce Dept is seeking to get computer trade with the Iron Curtain countries going full bore. Apparently the color of patriotisa is green, and financial security above National Security. So if you got any old 16 or 32 bit computers laying around, or extra cash.....



Malbork, 25 June 1987

Dear Friends !

My name is Zbigniew. I am writing to you from Poland. Excuse my imperfect english. The address of your club I received last year from my friend, who was in your country. I am writing, because I will do nothing without your help.

I am an electric engineer. I am interested in hardware and software of microcomputers. We are twenty six young persons, who are interested in it. We write the programes in BASIC, FORTRAN, PASCAL and assemblers: Z-80, 8080, 8086. We are learning programming in C language. Alas, the acces to the required literature and any 16-bits computers is very difficult.

We meet together one time in week. We have three 8-bits computers: two TIMEX 2048 and one ATARI 800XL. We made our software. We dream of the floppy disk drive and our printer. (We succeeded in printing this letter used of the borrowed printer.) But our greatest dream is ATARI ST or IBM PC XT Compatible.

We have a great request to make. If you can somehow help us, do it please! Perhaps you have a computers equipment witch one is not used long ago. Send it to us. We are able to repair it by oneself.

Please, if you can to give some financial help, do it on after-mentioned score:

Bank PKO SA o/Gdansk, Sopot, Pl.Konstytucji 3 Maja 1, POLAND
 Mr Zbigniew Dziekonski, 82-200 Malbork, Osiedle XX-lecia 18A/2
 No 795-4-58812

We set one's hopes on you only. If we will have the 16-bits computer, then we can to repay makinge the soft-ware for you.

We would like to enter into correspondence with you. This is our address:

Mr Z.Dziekonski, 82-200 Malbork, POLAND
 Osiedle XX-lecia PRL 18A/2

We are waiting for the message from you.

Yours very truly

Zbigniew & friends.

←

A repro of the cover for The Guide to T/S Telecommunications, put out by Pete Fischer and Steve Ishii, a 98 page effort on behalf of and for TS users. (Final version of the cover has a pic of the Golden Gate.) If you have NOT yet ordered this lovely bunch of coconuts then by all means get that checkbook out now and send Pete one for \$7.50. Mail it to PO BOX 2002, Tempe, AZ 85281. This is money well spent, and whether you are well versed or a novice on telecommo- that's modeming - using your computer and your telephone, you will get a kick outa this. Via Pete and John Colonna I got a hold of a bunch of screens(which can be transferred via your computer/modem), and so I sprinkled some through out this issue.

 ???!??OUT OF SERVICE!??!!

Several of us locally having been expiring bad connections with BUBBS-607-693-3359- with well near a 100 TS files uploaded to the Timex files, it is a near tragedy that the SYSOPS pulled the plug on us. Apprently some user said something nasty earlier this year and the SYSOPS put a FOR SALE sign up. Now I can not reach him via voice line either.

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 * est. 1982 *

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WANTED - FOR SALE - SWAP
 BUY - SALE - TRADE
 FOR SALE: TS 2068 Computer
 used 3 months, with 1 game
 cartridge, \$90. TS2040, \$30.
 1050 Modem board, case, parts for
 IF- BEST OFFER. TS1016 RAM, \$5.
 William Tilley 607-748-1885
 709 Delano Ave.
 Vestal, NY 13850

 FOR SALE: TS2068, OLIVETTI Ink
 Jet Printer, Aerco IF, OS64 cart.
 tape rcdr. Over 10 pcs of soft-
 some unused-all docs-BEST OFFER:
 Myrna MacDonald 607-656-8959
 61 North Chenago Ave.
 Greene, NY 13778

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 A hello and welcome to new members:John Constantine, Chapel Hill, NC; Ray Alba, Orange, TX; Pete Fischer, Tempe, AZ; Courtney Cain, Waukegan, IL; Larry Kenny, Navan, ONT; Donald Flood, Oldsmar, FL; Harold Romer, Johnson City, TN; Thomas Skapinski, Coram, NY; and Vearl Faunce, Tipton, IN. A little input from each and everyone makes the letter more interesting for all.
 And here's a Scroll of the Screen and tip of the cursor to RENEWING members, William Walker, Huntington, WV; W.C. MacDougall, Montreal, QUE; and to local members, Wes Brzozowski, John Colonna, Scott Eddy, Charles Koeth, Don Lamem, John Livingston, Stanley Livingston, Carlyle Morris, George Penney, Dave Schoenwetter, and William Tilley. If you have paid your dues this summer and your name isn't here, contact Paul Hill. If you have NOT paid but wish to stay on the mailing list, send your dues in NOW!(Local members only)

The TS User Clubs of Florida announce the:
SUNSTATE TIMEX-SINCLAIR WINTER FEST '88
 now being organized
 A BBS has been set up called the "Sunstate TS Bulletin Service" at
 904-775-0093 300 Baud 8-1-N
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